

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

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**FINDING OF EMERGENCY
GOVERNMENT CODE SECTION 11346.1
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
PROPOSED EMERGENCY AMENDMENTS TO TITLE 8
CALIFORNIA CODE OF REGULATIONS
SECTION 3427 OF THE GENERAL INDUSTRY SAFETY ORDERS**

The Occupational Safety and Health Standards Board (Board) hereby finds that the proposed emergency amendment to Title 8 of the California Code of Regulations, as described in the Informative Digest below, constitutes an emergency regulation pursuant to Government Code Section 11346.1. The Division of Occupational Safety and Health (Division) initiated the request for the Board to adopt amendments to Section 3427 of the General Industry Safety Orders (GISO).

The epidemic bark beetle infestation and recent wild land fires that ravaged southern California counties have caused extensive damage to countless thousands of trees, necessitating their removal for purposes of public safety. These damaged trees are not stable. These trees and their and their branches and limbs are subject to falling, in some cases close to nearby residential and commercial areas, waterways or near high voltage power lines. The damaged condition of these trees presents an immediate hazard not only to the public in nearby areas, but to workers responsible for clearing and removing the trees. The removal of bark beetle and fire damaged trees is also essential before the full restoration of damaged telephone lines, cable and low and high voltage electrical lines can be achieved. Further, it is also necessary to remove these damaged trees as soon as possible to minimize the extent and amount of dry and dead wood that could serve as fuel in the upcoming fire season, as last year's Southern California fires covered over half a million acres, destroyed approximately 2,300 structures, caused billions of dollars in damage, and resulted in 16 fatalities.

The location and extent of damage to individual trees presents clear danger for tree workers to attempt to access them by conventional methods such as by climbing or use of aerial devices. The bark beetle infestations, which have been widespread throughout California's forested lands, have resulted in large numbers of trees either dead or dying. Dead and dying trees not only raise the wild land fire risk, threatening homeowners by increasing fuel for a future fire, but make the trees hazardous to access for trimming or removal by conventional means such as climbing due to the fragile nature of the limbs and external bark of the tree.

In order to ensure that the safest feasible methods are always used to access trees, the Division believes it is necessary to clarify that the use of cranes, under certain circumstances and with specific safeguards in place, is lawful when this practice constitutes the safest method for elevating employees to conduct tree removal operations. Currently, provisions in the General Industry Safety Orders, Article 98, Section 4995 prohibit employees from riding on a crane hook

for access to any work location. However, Section 4990 specifically states that the requirements contained in Article 98 do not take precedence over vertical standards “of a specific nature.” Section 3427 is a vertical industry standard for tree maintenance and removal work, so the proposed provisions within Section 3427 would permit the limited use of cranes for the purpose of accessing trees, provided the conditions prescribed in the proposed standard are met.

For the preservation of the public safety and the safety of the affected workforce, it is necessary to immediately adopt standards that would prescribe a safe alternative means and method to access trees. The following amendments to Title 8, California Code of Regulations, GISO Section 3427 are proposed to permit a qualified tree worker to enter a tree suspended by the closed safety type hook of a crane when a tree cannot be safely accessed by conventional methods permitted in existing standards.

Federal OSHA’s general industry standards contained in 29 Code of Federal Regulations (CFR), Part 1910, and construction-related standards contained in the 29 CFR, Part 1926, do not address the lifting of personnel attached by a suspended rope to the hook of a crane for the purpose of access to trees. However, federal OSHA industry-specific standards for marine terminals contained in 29 CFR 1917.45(j)(1)(ii) provide in summary, that an employee could be hoisted from the hoisting apparatus of a crane or derrick in a boatswain’s¹ chair or other device rigged to prevent it from accidental disengagement from the hook or supporting member.

The practice of hoisting a tree worker is permitted in the national consensus standard, ANSI Z133.1-2000, entitled “Pruning, Repairing, Maintaining and Removing Trees, and Cutting Brush – Safety Requirements.” However, this work practice is not addressed in California’s standards in GISO, Article 12, “Tree Work, Maintenance and Removal.” Therefore, in order to permit this practice when it is unsafe to access trees using conventional methods (climbing or aerial device), the following proposed amendments to Section 3427 are necessary.

INFORMATIVE DIGEST OF PROPOSED ACTION/POLICY STATEMENT OVERVIEW

The Board proposes to adopt emergency amendments to GISO Section 3427, “Tree Work, Maintenance or Removal,” for the reasons outlined above, as authorized by Labor Code Section 142.3.

Proposed amendments for subsections 3427(a)(1) & (2).

Existing Section 3427 “Climbing and Access,” provides standards for safe working procedures for climbing and accessing trees, pruning and trimming, and tree removal activities. Subsection (a)(1) requires that prior to climbing the tree, the tree shall be visually inspected by a “qualified person” who shall determine and ensure a safe method of entry into the tree. An amendment is proposed that would require that “a qualified tree worker” does the inspection and determination of method for safe entry. The proposed amendment would have the effect of ensuring that a

¹ “Boatswain’s chair” is a seat supported by slings attached to a suspended rope, designed to accommodate one employee in a sitting position.

person who has the training, experience and demonstrated familiarity with the techniques and hazards specific to tree work performs the inspection.

The language from existing subsection 3427(a)(2) requires the location of all electrical conductors and equipment within the work area be identified in relation to the work being performed. It is proposed that this subsection be deleted and editorially move this requirement to subsection (a)(1) for clarity purposes. The amendment would have the effect of ensuring that the location of all electrical conductors and equipment are identified during the inspection process when determining what the safest method and location of entry into the tree will be.

Proposed new subsection 3427(a)(1)(A).

This proposed new subsection would require that when a tree cannot be safely accessed by climbing or the use of aerial devices, a qualified tree worker may be hoisted into position by using an approved tree worker's saddle suspended from the closed hook of a crane. In addition to the line/rope suspending the worker in a tree saddle, the standard would also require the tree worker's saddle to be secured to an independent safety line attached above the crane hook. The effect of this new subsection would limit the use of a crane to hoist a qualified tree worker only when access by climbing or aerial device is not safe. Further effects of this new subsection would ensure that while the qualified tree worker is suspended from the crane hook, appropriate equipment such as another line (independent of the line used to suspend the worker and tree saddle to the crane hook) is used so that the worker has fall protection while access and positioning from the crane into the tree is achieved.

Proposed new subsection 3247(a)(1)(A)1.

This proposed new subsection would require all climbing equipment, lines, and rigging to have a minimum breaking strength of at least 5000 pounds. This amendment is consistent with the provisions for fall protection systems contained in Section 1670 of the Construction Safety Orders. The effect of this new subsection would ensure that all fall protection equipment meets established design and strength requirements.

Proposed new subsection 3427(a)(1)(A)2.

The provisions of this new subsection would require that the crane boom and load line be moved in a slow, controlled, cautious manner with no sudden movements when the qualified tree worker is attached to the crane. The effect of this new subsection would mitigate potential hazards associated with swinging the worker that may result from sudden or unexpected movements of the crane.

Proposed new subsection 3427(a)(1)(A)3.

GISO Section 5004, "Crane or Derrick Suspended Personnel Platforms," applies to the design, construction and maintenance of personnel platforms, and the hoisting of personnel platforms on load lines of cranes and derricks. A personnel platform must be equipped with a guardrail system and a number of other requirements not applicable or practicable for the design of an

approved tree worker saddle. The provisions of Section 5004 then would not be applicable when hoisting a worker suspended in an approved tree worker saddle. However, Section 5004 contains provisions that address similar safe crane operations when hoisting personnel. Therefore, the proposed new subsection references the provisions of Sections 5004(d)(2), (4), (5), (6), and 5004(e) and would have the effect of specifying safe crane operations for hoisting a qualified tree worker suspended in a tree worker saddle.

Proposed new subsection 3427(a)(1)(A)4.

This proposed new subsection would specify that the qualified tree worker being hoisted shall be in continuous communication with the crane operator, or signals shall be relayed by a qualified signal person as provided in Section 5001. Maintaining effective communication with the crane operator is essential for immediate action necessary by the crane operator for the safety of the tree worker being hoisted by a crane. This new subsection would have the effect of ensuring prompt communication with the crane operator at all times.

Proposed new subsection 3427(a)(1)(A)5.

New subsection 3427(a)(1)(A)5 would require that the crane operator remain at the controls when the qualified tree worker is attached to the crane. This proposed new subsection would have the effect of ensuring that the crane operator could take immediate action to address emergencies and take actions necessary for the safe positioning of the tree worker.

Proposed new subsection 3427(a)(1)(A)6.

The proposed new subsection would require the qualified tree worker to be detached from the crane while the load is hoisted. Crane accidents are most likely to occur when the crane is lifting a load. Therefore, the proposed new subsection would have the effect of prohibiting the tree worker from being attached to the crane when the load is being hoisted.

Proposed new subsection 3427(a)(1)(A)7.

This proposed new subsection would require the employer to ensure that the crane operator and qualified tree worker determine the weight of the load being lifted to prevent the crane from being overloaded. The proposed new subsection would have the effect of mitigating the possibility of overloading the crane as the weight of the tree portion or limb being removed and hoisted would need to be calculated and a determination made that the load is within the crane's lift capacity (load charts) provided by the crane manufacturer.

Proposed new subsection 3427(a)(1)(A)8.

Under certain conditions, GISO Section 5004 permits the hoisting of personnel platforms on the load line of cranes. Section 5004(k)(5) requires that the hoisting of employees be discontinued in dangerous weather conditions or other impending danger. Proposed new subsection 3427(a)(1)(A)8 adopts similar language and would have the effect of prohibiting work when inclement weather or other dangerous conditions present a hazard to employees.

Notes No. 1 and 2 for Section 3427.

An informational note is proposed for this section advising that other crane requirements are contained in GISO Group 13, Cranes and Other Hoisting Equipment. A second informational note is proposed advising that Article 38 of the High Voltage Electrical Safety Orders addresses line clearance tree trimming operations. The effect of these notes is to remind the reader of other standards related to crane operations, and tree trimming operations in the vicinity of exposed energized conductors and equipment.

DOCUMENTS RELIED UPON

- ANSI Z133.1 - 2000 for Arboricultural Operations - "Pruning, Repairing, Maintaining and Removing Trees, and Cutting Brush – Safety Requirements."
- Memorandum dated February 18, 2004, from Len Welsh, Acting Chief, Division of Occupational Safety and Health, to Steven Rank, Chairman, Occupational Safety and Health Standards Board, regarding Emergency Safety Order to Address Access to Trees.

These documents are available for review Monday through Friday from 8:00 a.m. to 4:30 p.m. at the Standards Board Office located at 2520 Venture Oaks Way, Suite, 350, Sacramento, California.

STRIKEOUT/UNDERLINE DRAFT PROPOSAL

See Attachment No. 1.

SIDE-BY-SIDE CODE COMPARISON WITH FEDERAL STANDARD

See Attachment No. 2.

Federal OSHA general industry regulations do not address requirements for climbing/access via cranes specific to tree maintenance or removal. However, a side-by-side comparison is provided for informational purposes. The comparison identifies federal OSHA standards that address entry into trees associated with electrical hazards (29 CFR 1910.268) and federal marine terminal standards that address the lifting of employees by the hoisting apparatus of a crane or derrick.

COST ESTIMATES OF PROPOSED ACTION

The proposed standard would have no cost or fiscal impact to affected employers because it does not mandate, but rather permits an alternative method (use of a crane) to access trees when conventional methods are unsafe.

Costs or Savings to State Agencies

No cost or savings to state agencies would result as a consequence of the proposed action.

Costs or Savings in Federal Funding to the State

The proposal would not result in costs or savings in federal funding to the state.

Costs or Savings to Local Agencies or School Districts Required to be Reimbursed

No costs to local Agencies are required to be reimbursed. See explanation under the heading “Determination of Mandate.”

Other Nondiscretionary Costs or Savings Imposed on Local Agencies

This proposal does not impose nondiscretionary costs or savings on local agencies.

DETERMINATION OF MANDATE

The Occupational Safety and Health Standards Board has determined that the proposed regulations do not impose a local mandate. Therefore, reimbursement by the State is not required pursuant to Part 7 (commencing with Section 17500) of Division 4 of the Government Code because the proposed amendments will not require local agencies or school districts to incur additional costs in complying with the proposal. Furthermore, these regulations do not constitute a “new program or higher level of service of an existing program within the meaning of Section 6 of Article XIII B of the California Constitution.”

The California Supreme Court has established that a “program” within the meaning of Section 6 of Article XIII B of the California Constitution is one which carries out the governmental function of providing services to the public, or which, to implement a state policy, imposes unique requirements on local governments and does not apply generally to all residents and entities in the state. (County of Los Angeles v. State of California (1987) 43 Cal.3d 46.)

These proposed regulations do not require local agencies to carry out the governmental function of providing services to the public. Rather, these regulations require local agencies to take certain steps to ensure the safety and health of their own employees only. Moreover, these proposed regulations do not in any way require local agencies to administer the California Occupational Safety and Health program. (See City of Anaheim v. State of California (1987) 189 Cal.App.3d 1478.)

These proposed regulations do not impose unique requirements on local governments. All state, local and private employers will be required to comply with the prescribed standards.

Attachments